

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

STATEMENT UNDER 37 CFR 3.73(b)

Applicant, **ISIS Pharmaceuticals, Inc.**, a corporation, states that it is:

the assignee of the entire right, title, and interest of the patents/applications identified in Table A attached hereto.

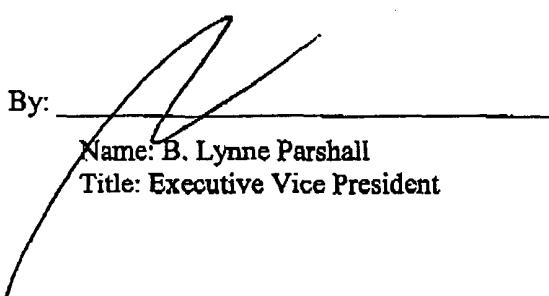
The extent (by, percentage) of its ownership interest is 100% in the patents/applications identified in Table A.

a copy of the pertinent assignment from the inventor(s) of the patent applications identified in Table A is enclosed herewith.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Respectfully submitted,
ISIS PHARMACEUTICALS, INC.

Date: 7/22/2003

By: 

Name: B. Lynne Parshall
Title: Executive Vice President

A S S I G N M E N T

WHEREAS, we Donna T. Ward, residing at 41349 Magnolia Street, Murrieta, California 92562 and Andrew T. Watt, residing at 1500 Shadowridge Dr. Apt. 154, Vista, California 92083 hereinafter referred to as the assignors, are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Case No. RTS-0236 entitled **Antisense Modulation of EIF2C1 Expression**; filed concurrently herewith; and

WHEREAS, **Isis Pharmaceuticals Inc.** hereinafter referred to as the assignee, of **2292 Faraday Ave, Carlsbad, California 92008** is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time a request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

DOCKET NO.:RTS-0236

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

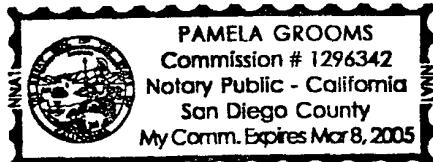
IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Dated: 11/1/01

Donna T. Ward
Donna T. Ward

STATE OF California ;
COUNTY OF San Diego ; ss.

This 1st day of November, before me personally came the above-named Donna T. Ward, who executed the foregoing Assignment in my presence, and who acknowledged to me that ~~he/she~~ executed the same of ~~his/her~~ own free will for the purposes set forth therein.



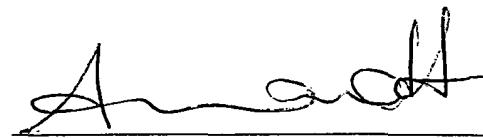
Pamela Grooms
Notary Public

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DOCKET NO.: RTS-0236

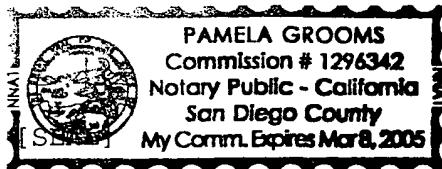
Dated:

11/02/01


Andrew T. Watt

STATE OF California)
COUNTY OF San Diego) ss.

This 2nd day of November, before me personally
came the above-named Andrew T. Watt, who executed the foregoing
Assignment in my presence, and who acknowledged to me that he/she
executed the same of his/her own free will for the purposes set forth
therein.




Pamela Grooms
Notary Public

Table A

Serial No. Patent No. Docket No.	Filing Date Issue Date	Inv ntor(s)	Examin r	Art Unit	Title
09/577,902 6,284,538 ISIS0004-102	May 24, 2000 September 4, 2001	B. Monia et al.	M. Schmidt	1635	ANTISENSE INHIBITION OF PTEN EXPRESSION
09/048,810 6,238,921 ISIS0052-101	March 26, 1998 May 29, 2001	L. Miraglia et al.	M. Shibuya	1635	ANTISENSE OLIGONUCLEOTIDE MODULATION OF HUMAN MDM2 EXPRESSION
09/280,805 6,184,212 ISIS0052-102	March 26, 1999 February 6, 2001	L. Miraglia et al.	J. Epps	1635	ANTISENSE MODULATION OF HUMAN MDM2 EXPRESSION
09/731,457 ISIS0053-100	December 6, 2000	I. Popoff et al.	J. Schultz	1635	ANTISENSE MODULATION OF DAMAGE SPECIFIC DNA BINDING PROTEIN 1, P127 EXPRESSION
09/659,860 ISIS0054-100	September 11, 2000	H. Zhang et al.	J. Schultz	1635	ANTISENSE MODULATION OF CASPASE 7 EXPRESSION
10/007,078 ISIS0055-100	November 8, 2001	D. Ward et al.	J. Schultz	1635	ANTISENSE MODULATION OF EIF2C1 EXPRESSION
09/953,611 ISIS0056-100	September 13, 2001	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF PROTEIN KINASE R EXPRESSION
09/715,983 ISIS0057-100	November 20, 2000	B. Monia et al.	J. Zara	1635	ANTISENSE MODULATION OF PI3K P85 EXPRESSION
09/344,521 6,100,090 ISIS0057-101	June 25, 1999 August 8, 2000	B. Monia et al.	J. Zara	1635	ANTISENSE INHIBITION OF PI3K P85 EXPRESSION
09/954,679 ISIS0058-100	September 12, 2001	D. Ward et al.	K. Lacourriere	1635	ANTISENSE MODULATION OF RIBONUCLEASE L EXPRESSION
09/484,617 6,303,374 ISIS0059-100	January 18, 2000 October 16, 2001	H. Zhang et al.	S. McGarry	1635	ANTISENSE MODULATION OF CASPASE 3 EXPRESSION

Serial No. Patent No. Docket No.	Filing Date Issue Date	Inventor(s)	Examiner	Art Unit	Title
09/679,298 6,566,131 ISI0060-100	October 4, 2000 May 20, 2003	L. Cowser	M. Schmidt	1635	ANTISENSE MODULATION OF SMAD6 EXPRESSION
09/679,299 6,566,135 ISI0061-100	October 4, 2000 May 20, 2003	A. Watt	J. Zara	1635	ANTISENSE MODULATION OF CASPASE 6 EXPRESSION
09/853,768 6,444,466 ISI0062-100	May 10, 2001 September 3, 2002	D. Ward et al.	J. LeGuyader	1635	ANTISENSE MODULATION OF HELICASE-MOI EXPRESSION
10/001,863 ISI0063-100	November 19, 2001	J. Karras et al.	To Be Determined	1645	ANTISENSE MODULATION OF TOLL-LIKE RECEPTOR 4 EXPRESSION
09/865,993 ISI0064-100	May 25, 2001	B. Monia et al.	J. Zara	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 5 EXPRESSION
09/667,018 ISI0065-100	September 20, 2000	H. Zhang et al.	J. Schultz	1635	ANTISENSE MODULATION OF CASPASE 2 EXPRESSION
10/271,887 ISI0066-100	October 15, 2002	H. Zhang et al.	To Be Determined	1635	ANTISENSE MODULATION OF CASPASE 9 EXPRESSION
09/659,845 6,492,170 ISI0066-101	September 11, 2000 December 10, 2002	A. Watt	A. Wang	1639	ANTISENSE MODULATION OF CASPASE 9 EXPRESSION
10/309,362 ISI0067-100	December 3, 2002	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF RECQL5 EXPRESSION
10/238,443 ISI0067-101	September 9, 2002	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF RECQL5 EXPRESSION
09/798,185 ISI0067-102	March 1, 2001	D. Ward et al.	K. Lacourriere	1635	ANTISENSE MODULATION OF RECQL5 EXPRESSION
09/798,096 6,399,378 ISI0068-100	March 1, 2001 June 4, 2002	D. Ward et al.	S. McGarry	1635	ANTISENSE MODULATION OF RECQL2 EXPRESSION

Serial No. Patent No. Docket No.	Filing Date Issue Date	Inventor(s)	Examiner	Art Unit	Title
09/792,594 6,436,706 ISI0069-100	February 23, 2001 August 20, 2002	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RECQL4
09/793,807 ISI0070-100	February 23, 2001	D. Ward et al.	J. Zara	1635	ANTISENSE MODULATION OF RECQL
09/358,381 6,020,199 ISI0071-100	July 21, 1999 February 1, 2000	B. Monia et al.	M. Schmidt	1635	ANTISENSE MODULATION OF PTEN
10/006,430 ISI0072-100	December 10, 2001	M. Graham et al.	S. McGarry	1635	ANTISENSE MODULATION OF CD81
10/175,492 ISI0073-100	June 17, 2002	K. Dobie et al.	To Be Determined	1645	ANTISENSE MODULATION OF PAZ/PIWI DOMAIN CONTAINING PROTEIN
10/199,221 ISI0074-100	July 18, 2002	B. Monia et al.	J. Epps	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 6 EXPRESSION
09/487,444 6,159,697 ISI0075-100	January 19, 2000 December 12, 2000	B. Monia et al.	A. Wang	1635	ANTISENSE MODULATION OF SMAD7
10/181,603 ISI0075-101	July 17, 2002	B. Monia et al.	To Be Determined	1651	ANTISENSE MODULATION OF SMAD7
09/732,199 6,379,960 ISI0076-100	December 6, 2000 April 30, 2002	I. Popoff et al.	M. Schmidt	1635	ANTISENSE MODULATION OF DAMAGE-SPECIFIC DNA BINDING PROTEIN 2, p48
09/920,668 6,482,644 ISI0077-100	August 1, 2001 November 19, 2002	L. Cowser	M. Schmidt	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
09/922,146 6,566,133 ISI0078-100	August 1, 2001 May 20, 2003	L. Cowser	T. Gibbs	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION

Serial No. Patent No. Docket No.	Filing Date Issu Date	Inventor(s)	Examiner	Art Unit	Title
09/487,445 6,258,600 ISIS0079-100	January 19, 2000 July 10, 2001	H. Zhang et al.	M. Shibuya	1635	ANTISENSE MODULATION OF CASPASE 8 EXPRESSION
10/181,177 ISIS0079-101	July 12, 2002	H. Zhang et al.	To Be Determined	1632	ANTISENSE MODULATION OF CASPASE 8 EXPRESSION